

REMARKS/ARGUMENTS

Applicants respectfully request reconsideration of the present application in view of the following reasons. No new matter has been added. Claims 11-14 were withdrawn from consideration, and Claim 16 was cancelled in a previous Response. As such, Claims 1-10 and 15 are now pending in this application.

I. The Office Action Has Failed to Respond to Applicants' Previous Arguments

In the Amendment and Reply Accompanying RCE filed on August 27, 2007, Applicants amended the claims and argued for the patentability of the claims (in their present form and as amended on August 27, 2007), in view of European Patent Application No. 1,071,296 to Leroy et al. (hereinafter "Leroy").

In the instant Office Action, the Examiner acknowledged Applicant's Response to the Election/Restriction Requirement filed on December 21, 2007. However, the Examiner has failed to respond to Applicants' arguments with respect to Leroy. The first Office Action following the RCE included only the Election/Restriction Requirement, and also failed to address Applicants' arguments filed on August 27, 2007.

MPEP 707.07(f) reads:

In order to provide a complete application file history and to enhance the clarity of the prosecution history record, an examiner must provide clear explanations of all actions taken by the examiner during prosecution of an application.

Where the requirements are traversed, or suspension thereof requested, the examiner should make proper reference thereto in his or her action on the amendment.

Where the applicant traverses any rejection, the examiner should, if he or she repeats the rejection, take note of the applicant's argument and answer the substance of it.

...

The examiner must address all arguments which have not already been responded to in the statement of the rejection.

(Emphasis added.) Because Applicants' arguments for the patentability of the claims (in their present form and as previously amended on August 27, 2007) with respect to Leroy have never been addressed, Applicants respectfully submit that the instant Office Action is incomplete. Accordingly, if not all of the pending claims are allowed in view of the following reasons, any subsequent Office Action should be **non-final**.

II. **Claim Rejections Under 35 U.S.C. § 102(a)**

In Section 2 of the Office Action, Claims 1-10 and 15 were rejected under 35 U.S.C. § 102(a) as being anticipated by European Patent Application No. 1,071,296 to Leroy et al. (hereinafter "Leroy"). Applicants respectfully traverse the rejection.

A. **Claims 1 and 15**

The claimed embodiments are directed to data packet forwarding to a connection-oriented network. Independent Claim 1 recites, in part:

receiving the data packet, wherein the data packet includes a **unicast destination address** corresponding to a mobile node;

generating a link-layer frame, wherein the link-layer frame includes a broadcast address and the unicast destination address; and

sending, via the broadcast address, the link-layer frame to a plurality of access devices, wherein at least one access device of the plurality of access devices supports the mobile node.

(Emphasis added). Independent Claim 15 recites, in part, "a receiving unit configured to receive the data packet, wherein the data packet includes a **unicast destination address** corresponding to a mobile node." (Emphasis added). Applicants respectfully submit that Leroy does not teach, suggest, or describe at least the handling of a data packet which is directed toward "a unicast destination address," as recited in Claims 1 and 15.

The Examiner has cited paragraphs [0004]-[0006], [0012]-[0015], [0021]-[0024], and [0031]-[0034] of Leroy, and asserts that Leroy discloses the above-mentioned elements. Applicants respectfully disagree. Applicants respectfully submit that the cited portions of Leroy, and the rest of its disclosure, are silent with respect to the elements as recited by

Claims 1 and 15. In particular, Leroy is silent with respect to at least “a unicast destination address” as claimed.

Leroy discloses a method of eliminating redundant transmissions of data packets which are directed toward multicast addresses. (Col. 10, lines 5-11). Specifically, an “IP data packet PU-DP” which includes “an internet multi-cast address PU-MCA in the destination address field” is received by an IP router. (Col. 5, line 58 – col. 6, line 6). The IP router forwards the IP data packet to “gateway nodes GGSN1 and GGSN2.” (Col. 6, lines 23-24; fig. 1). The “gateway nodes ... encapsulate an IP data packet PU-DP ... in a private data packet PR-DP that can be routed through the GPRS-SYSTEM towards the destination mobile stations.” (Col. 6, lines 23-28). Leroy further discloses that “the gateway node GGSN1 that encapsulates the IP data packet PU-DP in the private data packet PR-DP fills the destination address field of the private data packet header PR-H with a private multi-cast address PR-MCA **when the destination address field of the IP data packet PU-DP contains an internet multi-cast address PU-MCA.**” (Col. 6, lines 39-45). The private data packet is forwarded a single time to each serving node which supports one or more recipients of the IP data packet, where recipients of the IP data packet are identified using a “routing table” which keeps track of multi-cast group members. (Col. 10, lines 4-22).

Thus, Leroy discloses a method for transmitting data packets addressed to a multi-cast group to each member of the multi-cast group. A private data packet which includes a private multi-cast address corresponding to the public multi-cast address is created. The private data packet is forwarded to serving nodes which support members of the multi-cast group. The serving nodes and members are identified via routing tables. At the serving nodes, the private data packet is duplicated (if necessary) and forwarded to the members of the multi-cast group. Resources are conserved because the private data packet is only forwarded a single time to each serving node which supports a member of the multi-cast group.

Thus, it is clear that Leroy does not teach, suggest, or describe the handling of a data packet which is addressed to a “unicast destination address,” as recited in Claims 1 and 15. Leroy is directed *entirely toward a method for improving the delivery of multi-cast data packets*, and does not mention data packets which are addressed to unicast addresses.

Conversely, Applicants' claimed embodiments utilize a multi-cast technique to route a unicast data packet when the link-layer address of the destination mobile node is unknown. Applicants respectfully submit that delivering multi-cast data packets is not the same as handling a data packet which includes a unicast address.

For at least the reasons set forth above, Applicants respectfully submit that Leroy does not teach each and every element as recited in independent Claims 1 and 15. Applicants respectfully request withdrawal of the rejection of Claims 1 and 15 under 35 U.S.C. § 102(a). For at least the same reasons, Applicants respectfully request withdrawal of the rejection of Claims 2-10, which depend from Claims 1.

B. Claim 2

Claim 2 recites, in part, that the "broadcast address is predefined." In the instant Office Action, the Examiner has relied upon paragraph [0031] of Leroy, and asserts that Leroy teaches a predefined broadcast address. Applicants respectfully disagree. Paragraph [0031] of Leroy reads:

[0031] Summarising, a registration mechanism is provided in the GPRS-SYSTEM whereby the service nodes SGSN 1, SGSN2, SGSN3, SGSN4 and SGSN5 register which mobile terminals MS1, MS2, MS3, MS4 and MS6 joined a public multi-cast group via a join message that is sent to a gateway node and returned thereby as a private join message. In case a mobile station moves to another service area, the registered information must be updated. This update may form part of the inter SGSN routing area update procedure in a cellular mobile system. In case a mobile station wants to be deleted as member of a public multi-cast group, it will send a leave message which is treated in a similar way as the join messages. The service node thereupon de-registers the mobile station as member of the multi-east group.

Thus, paragraph [0031] of Leroy is silent with respect to the broadcast address being "predefined," as recited in Claim 2. For at least these reasons, Applicants respectfully submit that Claim 2 is in condition for allowance, and request withdrawal of the rejection.

C. Claim 3

Claim 3 recites, in part, “determining that the at least one access device supports the mobile node,” and “forwarding the link-layer frame to the mobile node.” In the instant Office Action, the Examiner has cited paragraphs [0004]-[0006], [0012]-[0015], [0021]-[0024], and [0031]-[0034] of Leroy, and asserts that Leroy discloses the above-mentioned elements. Applicants respectfully disagree. Applicants respectfully submit that the cited portions of Leroy, and the rest of its disclosure, are silent with respect to the elements recited by Claim 3, particularly “the link-layer frame.” Applicants respectfully request that the Examiner explain in detail where Leroy discloses “determining that the at least one access device supports the mobile node,” and “forwarding the link-layer frame to the mobile node,” as recited in Claim 3. Applicants respectfully submit that such disclosure is not present in Leroy. For at least these reasons, Applicants respectfully submit that Claim 3 is in condition for allowance, and request withdrawal of the rejection.

D. Claim 5

Claim 5 recites, in part, that the “broadcast address is a link-layer address.” The Examiner has relied upon paragraphs [0031]-[0034] of Leroy, and asserts that Leroy teaches these elements. Applicants respectfully disagree. Throughout the disclosure, Leroy is silent with respect to a “link-layer address.” Applicants respectfully request that the Examiner explain in detail where Leroy discloses that the “broadcast address is a link-layer address,” as recited in Claim 5. Applicants respectfully submit that such disclosure is not present in Leroy. For at least these reasons, Applicants respectfully submit that Claim 5 is in condition for allowance, and request withdrawal of the rejection.

E. Claim 6

Claim 6 recites, in part, that the “plurality of access devices store mappings between supported destination addresses and link-layer addresses corresponding to the supported destination addresses.” In the instant Office Action, the Examiner has cited paragraphs [0004]-[0006], [0012]-[0015], [0021]-[0024], and [0031]-[0034] of Leroy, and asserts that Leroy discloses the above-mentioned elements. Applicants respectfully disagree. Applicants

respectfully submit that the cited portions of Leroy, as well as the rest of its disclosure, are silent with respect to the elements recited by Claim 6. Applicants respectfully request that the Examiner explain in detail where Leroy discloses that the “plurality of access devices store mappings between supported destination addresses and link-layer addresses corresponding to the supported destination addresses,” as recited in Claim 6. Applicants respectfully submit that such disclosure is not present in Leroy. For at least these reasons, Applicants respectfully submit that Claim 6 is in condition for allowance, and request withdrawal of the rejection.

F. Claim 7

Claim 7 recites, in part, that the “**unicast** destination address is a network layer address” (emphasis added). On page 3, lines 10 and 11 of the instant Office Action, the Examiner asserts that paragraph [0031]-[0034] of Leroy disclose “wherein said *multicast* destination address is a network-layer address...” (emphasis added).

Thus, Applicants respectfully submit that the Examiner has misread Claim 7 of the present application, which recites that the “**unicast** destination address is a network layer address” (emphasis added). As discussed above, Applicants respectfully submit that the cited portions of Leroy, as well as the rest of its disclosure, are silent with respect to a unicast destination address as claimed. For at least these reasons, Applicants respectfully submit that Claim 7 is in condition for allowance, and request withdrawal of the rejection.

G. Claim 8

Claim 8 recites, in part, that the “the data packet further comprises a payload, and further wherein the payload is included in the link-layer frame.” In the instant Office Action, the Examiner has cited paragraphs [0004]-[0006], [0012]-[0015], [0021]-[0024], and [0031]-[0034] of Leroy, and asserts that Leroy discloses the above-mentioned elements. Applicants respectfully disagree. In particular, as discussed above, Leroy is silent with respect to at least the claimed “link-layer frame.” It follows that Leroy also fails to disclose that “the payload is included in the link-layer frame” as claimed. Applicants respectfully request that the Examiner explain in detail where Leroy discloses that the “the data packet further comprises a payload, and further wherein the payload is included in the link-layer frame,” as recited in

Claim 8. Applicants respectfully submit that such disclosure is not present in Leroy. For at least these reasons, Applicants respectfully submit that Claim 8 is in condition for allowance, and request withdrawal of the rejection.

H. Claim 9

Claim 9 recites, in part, “encapsulating said data packet into the link-layer frame.” In the instant Office Action, the Examiner has cited paragraphs [0031]-[0034] of Leroy, and asserts that Leroy discloses the above-mentioned elements. Applicants respectfully disagree. Applicants respectfully submit that the cited portions of Leroy, as well as the rest of its disclosure, are silent with respect to the elements recited by Claim 9. In particular, as discussed above, Leroy is silent with respect to the claimed “link-layer frame.” It follows that Leroy also fails to disclose “encapsulating said data packet into the link-layer frame” as claimed. Applicants respectfully request that the Examiner explain in detail where Leroy discloses “encapsulating said data packet into the link-layer frame,” as recited in Claim 9. Applicants respectfully submit that such disclosure is not present in Leroy. For at least these reasons, Applicants respectfully submit that Claim 9 is in condition for allowance, and request withdrawal of the rejection.

I. Claim 10

Claim 10 recites, in part, that the “link-layer frame is discarded by an access device from the plurality of access devices if the access device does not support the mobile node.” In the instant Office Action, the Examiner has cited paragraphs [0031]-[0034] of Leroy, and asserts that Leroy discloses the above-mentioned elements. Applicants respectfully disagree. Applicants respectfully submit that the cited portions of Leroy, as well as the rest of its disclosure, are silent with respect to the elements recited by Claim 10. In particular, as discussed above, Leroy is silent with respect to the claimed “link-layer frame,” and thus cannot possibly have taught that the “link-layer frame is discarded...” as claimed. Applicants respectfully request that the Examiner explain in detail where Leroy discloses that the “link-layer frame is discarded by an access device from the plurality of access devices if the access device does not support the mobile node,” as recited in Claim 10. Applicants

respectfully submit that such disclosure is not present in Leroy. For at least these reasons, Applicants respectfully submit that Claim 10 is in condition for allowance, and request withdrawal of the rejection.

Applicants believe that the present application is now in condition for allowance. Favorable reconsideration of the application as amended is respectfully requested.

The Examiner is invited to contact the undersigned by telephone if it is felt that a telephone interview would advance the prosecution of the present application.

The Commissioner is hereby authorized to charge any additional fees which may be required regarding this application under 37 C. F. R. §§ 1.16-1.17, or credit any overpayment, to Deposit Account No. 19-0741. Should no proper payment be enclosed herewith, as by a check or credit card payment form being in the wrong amount, unsigned, post-dated, otherwise improper or informal or even entirely missing, the Commissioner is authorized to charge the unpaid amount to Deposit Account No. 19-0741. If any extensions of time are needed for timely acceptance of papers submitted herewith, Applicants hereby petition for such extension under 37 C. F. R. §1.136 and authorize payment of any such extensions fees to Deposit Account No. 19-0741.

Respectfully submitted,

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